

I claim:

1. A system for remote monitoring of vertical transportation equipment comprising:

a) vertical transportation equipment;

5 b) a Remote Terminal Unit linked to said vertical transportation equipment;

c) a Human-Machine Interface Server linked to said Remote Terminal Unit;

10 d) a Computerized Maintenance Management System Server linked to said Human-Machine Interface; and,

e) remote devices which are communicably linked to said Computerized Maintenance Management System Server.

2. The system of claim 1, further comprising a Camera linked to said Remote Terminal Unit

15 3. The system of claim 1, further comprising a Video File Server linked to said Human-Machine Interface Server.

4. The system of claim 1, further comprising a Local Area Network linked to said Computerized Maintenance Management System Server.

20 5. The system of claim 4, further comprising a computer work station linked to said Computerized Maintenance Management System Server by said Local Area Network.

6. A system for remote monitoring of vertical transportation equipment comprising:

a) vertical transportation equipment having a Programmable Logic Control

b) a Remote Terminal Unit linked to said Programmable Logic Control;

5 c) a Camera linked to said Remote Terminal Unit

d) a Human-Machine Interface Server linked to said Remote Terminal Unit;

e) a Computerized Maintenance Management System Server linked to said Human-Machine Interface; and,

10 f) remote devices which are communicably linked to said Computerized Maintenance Management System Server.

7. The system of claim 6, further comprising a Camera linked to said Remote Terminal Unit.

15 8. The system of claim 6, further comprising a Video File Server linked
to said Human-Machine Interface Server.

9. The system of claim 6, further comprising a Local Area Network linked to said Computerized Maintenance Management System Server.

10. The system of claim 9, further comprising a computer work station linked to said Computerized Maintenance Management System Server by said Local Area Network.

11. A method of monitoring and managing vertical transportation equipment comprising:

a) providing vertical transportation equipment;

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- b) providing an equipment monitoring system which gathers real-time information corresponding to identified operational parameters for transportation equipment;
- c) detecting an equipment fault, failure, or alarm;
- 5 d) capturing and storing information relating to said equipment fault, failure, or alarm;
- e) transmitting said information relating to said equipment fault, failure, or alarm to a server; and
- 10 f) generating a system alarm corresponding to the equipment fault, failure or alarm;
- g) transmitting said system alarm to a remote device
12. The method of claim 11, further comprising:
- a) generating a work order which corresponds to said equipment fault;
- 15 b) transmitting said work order to a Remote Terminal Unit;
- c) completing the work order;
- d) capturing information from the completed work order;
- e) generating predictive and preventative maintenance schedules using information from completed work orders.
- 20 13. The method of claim 11 or 12, wherein said identified operational parameters are selected from the group consisting of: handrail speed; step speed; current draw on all motors; motor temperatures; electrical consumption; direction of

belt travel; deceleration rates, safety device activation times; comb impact force; total run time; run time by direction; run time since last fault; stop distance; and down time.

- 5 14. A method of monitoring vertical transportation equipment comprising gathering real-time information corresponding to identified operational parameters, wherein said operational parameters are selected from the group comprising: speed of travel; current draw on all motors; motor temperatures; electrical consumption; direction of travel; deceleration rates; safety device activation times; comb impact force; total run time; run time by direction; run time since last fault; stop distance; and down time.

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15 15. The method of claim 14, wherein said vertical transportation equipment is selected from the group comprising: escalators, elevators, moving walkways, carousels, revolving doors, and automated doors.

15 16. The method of claim 15, wherein said gathering of real-time information is performed by electronic means.